



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/511,137	08/22/2005	Yuuchirou Ogawa	121506	8749
25944 7590 05/26/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER				
FISCHER, JUSTIN R				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
05/26/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/511,137

Applicant(s)

OGAWA, YUICHIROU

Examiner

Justin R. Fischer

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☐ Claim(s) _____ is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 8, 9, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogawa (JP 2000-71722- English equivalent US 6,929,045) and further in view of Cottrell US 2005/0230021).

As best depicted in Figures 1 and 2, Ogawa discloses a tire construction having a carcass including a continuous cord and having a plurality of radial cord portions (e.g. 5C) and a plurality of circumferential cord portions (e.g. E). The reference is only devoid of a runflat insert in the sidewall region of the tire. Cottrell is similarly directed to a non-conventional carcass structure (one formed of individual cords, as opposed to calendered plies) and suggests the inclusion of an insert at the interior side of said carcass in order to provide tire operation in an underinflated condition (Paragraphs 3 and 4). It is further emphasized that runflat inserts represent a well known and conventionally included rubber layer in tire constructions for the reasons detailed above. As such, one of ordinary skill in the art at the time of the invention would have found it obvious to include a runflat insert in the tire of Ogawa. Thus, the reference is only devoid of a specific teaching to arrange the turnout end outside of a line segment QB. A fair reading of Ogawa, however, suggests that the turnout end can be relatively low

(Figure 4) or relatively high (Figure 5). In this same regard, the reference fails to place any limitation on the arrangement of the carcass turnup end and based on the general disclosure noted above, one of ordinary skill in the art at the time of the invention would have found it obvious to extend the carcass turnup end in accordance to the claimed invention (in a general region outside of the bead apex- such a position is consistent with the arrangement of carcass turnup ends).

Regarding claim 12, while the figures of Ogawa generally depict the circumferential cord portions as having the same radial height, the claim only requires that the respective heights are different. One of ordinary skill in the art at the time of the invention would not have expected the radial heights of the relevant cord portions to be identical (e.g. at microscopic level). It is emphasized that the claims do not require a quantitative relationship between the respective heights- the claims only require that the respective heights differ, even if it is only an extremely small distance. Lastly, applicant has not provided a conclusive showing of unexpected results to establish a criticality for the claimed arrangement.

As to claim 13, the contact portions of Ogawa are in the bead region.

With respect to claim 14, the limitations define the conventional tire components and tire manufacturing methods. One of ordinary skill in the art at the time of the invention would have found it obvious to form the tire of Ogawa in accordance to the method of the claimed invention. While Ogawa fails to expressly depict an innerliner, it is well recognized that innerliners represent a fundamental component of modern day tubeless tires- one example of such a construction is Cottrell (Paragraph 4).

Regarding claim 16, the carcass of Ogawa can include a plurality of cord layers (Column 3, Lines 44+) and such a construction would be expected to satisfy the claimed relationship (layers separated by a distance associated with the pitch).

3. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ueyoko (US 5,885,387) and further in view of Cottrell (US 2005/0230021). As best depicted in Figure 3, Ueyoko is directed to a tire construction comprising single beads and a carcass formed of a continuous cord that has a plurality of radial cord portions (e.g. 11B) and a plurality of circumferential cord portions (e.g. Ri(Li)). The reference is only devoid of a runflat insert in the sidewall region of the tire. Cottrell is similarly directed to a non-conventional carcass structure (one formed of individual cords, as opposed to calendered plies) and suggests the inclusion of an insert at the interior side of said carcass in order to provide tire operation in an underinflated condition (Paragraphs 3 and 4). It is further emphasized that runflat inserts represent a well known and conventionally included rubber layer in tire constructions for the reasons detailed above. As such, one of ordinary skill in the art at the time of the invention would have found it obvious to include a runflat insert in the tire of Ueyoko.

Lastly, with respect to claim 17, Ueyoko teaches that the turned up height of the carcass H1 is smaller than the bead apex height H2 (Column 4, Lines 43+). Based on Figure 2, it is evident that a plurality of embodiments would include a carcass turnup end that is significantly higher than the rim flange height and in accordance to the claimed invention (outward of claimed line segment). It is noted that while Figure 2 depicts the carcass turnup end as being relatively low, the depicted positioning is

described as being exemplary ("and in this embodiment"- Column 4, Lines 44+).

Absent any conclusive showing of unexpected results, one of ordinary skill in the art at the time of the invention would have found it obvious to include a carcass turnup end outward a line segment extending from the outer peripheral surface of the rim flange.

Response to Arguments

4. Applicant's arguments filed April 20, 2009 have been fully considered but they are not persuasive.

Applicant argues that Ogawa is directed to a split bead core assembly while claim 8 is directed to a runflat tire comprising a carcass toroidally extending over a pair of bead portions in which beads are embedded. It is agreed that Ogawa is not expressly directed to a runflat tire construction. However, in view of Cottrell, one of ordinary skill in the art at the time of the invention would have found it obvious to include a runflat insert in the tire of Ogawa and form a runflat tire construction. In particular, Cottrell teaches the use of a runflat insert with an extremely similar (and non conventional) carcass design in order to promote running during an underinflated condition. It is emphasized that the rejection with Ogawa is not an anticipatory rejection- in view of Cottrell, one of ordinary skill would have been amply motivated to form the tire of Ogawa as a runflat tire assembly.

Regarding the positioning of the carcass turnup end, applicant simply argues that such is not disclosed by Ogawa. The examiner agrees that such a limitation is not expressly disclosed by Ogawa. However, Ogawa specifically describes embodiments in which the carcass turnup is relatively low or relatively high- such a disclosure suggests

that the exact location of the carcass turnup end is not critical and one of ordinary skill in the art at the time of the invention would have readily appreciated a wide variety of configurations, including that detailed by the claimed invention (appears to be consistent with a high turnup end), absent any conclusive showing of unexpected results.

As to Cottrell, applicant contends that the reference is not applied in a manner to make up for the shortfalls of Ogawa and no reasonable combination of the currently-applied references can be considered to teach, or have suggested, the subject matter recited in claim 8. The examiner respectfully disagrees. Cottrell specifically recognizes the known inclusion of a runflat insert 91 axially inward of a carcass structure formed with a continuous cord in order to provide improved running during an underinflated condition. Thus, one of ordinary skill in the art at the time of the invention would have been amply motivated to include a runflat insert in the tire of Ogawa.

It is emphasized that (a) Ogawa broadly teaches a variety of positionings for the carcass turnup (includes low and high arrangements) and (b) Ueyoko only requires that the carcass turnup end is smaller than the bead apex and such a disclosure describes a plurality of embodiments in which said end is significantly outward of an outer peripheral surface of the rim flange.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Justin R. Fischer** whose telephone number is **(571) 272-1215**. The examiner can normally be reached on M-F (7:30-4:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Crispino can be reached on (571) 272-1226. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Justin Fischer
/Justin R Fischer/
Primary Examiner, Art Unit 1791
May 22, 2009